Applicant:Telesat Network Services, IncCall Sign:Not ApplicableFile No.:SES-STA-20211004-01686Special Temporary Authority ("STA")

Telesat Network Services, Inc ("TNSI") is granted special temporary authority for 30 days, commencing November 1, 2021, to conduct testing and demonstration of Seatel, and Viasat fixed transmit/receive earth station antennas at Mt. Jackson, VA on 29.0-29.1 GHz (Earth-to-space) and 19.2-19.3 GHz (space-to-Earth) frequency bands with the LEO 1 (S2976) space station operating in an NGSO orbit of approximately 800 x 1000 km inclined to 99.5° under the following conditions:

- 1. Operations must comply with the coordination agreement with the U.S. federal government under footnote US334 of the United States Table of Frequency Allocations and with the National Radio Astronomy Observatory.
- 2. The licensee shall take all necessary measures to ensure that the antennas do not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310 wherever such exposures might occur. Measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. As established in 47 CFR §1.1307(b)(4), specific mitigation actions are required to the extent necessary to ensure compliance with the exposure limits, including the implementation of an RF safety plan, restriction of access to those RF sources, and disclosure of spatial regions where exposure limits are exceeded. Additional guidance is provided in the FCC's OET Bulletin 65 (available on-line at https://www.fcc.gov/general/oet-bulletins-line). Due to the potential for exposure levels at ground height in excess of the general population limit, Category 2 mitigation requirements must be met for that region where the general population limits may be exceeded. Due to the potential for exposure levels exceeding ten times the occupational limit, Category 4 mitigation requirements must also be met. Required mitigation measures include positive access control, "WARNING/DANGER" signs, and controls or indicators (e.g., chains, railings, contrasting paint, diagrams). No access to the Category 4 region is permitted without Category reduction (e.g., turning off the transmitters). Controls or indicators must be reliable and consistently maintained. Chains affixed to posts (around the perimeter of antennas of Category 2 or Category 4) secured into the ground are recommended.
- 3. Transmitter(s) must be turned off during antenna maintenance to ensure compliance with the FCC-specified safety guidelines for human exposure to radiofrequency radiation in the region between the antenna feed and the reflector. Appropriate measures must also be taken to restrict access to other regions in which the earth station's power flux density levels exceed the specified guidelines.
- 4. Communications between Mt. Jackson station and Telesat space station, LEO 1, must comport with all existing and future space station coordination agreements reached between Canada and other administrations. In the absence of a coordination agreement, such communications must comport with applicable provisions of the ITU Radio Regulations.
- 5. All operations under this grant of STA shall be on an unprotected, non-harmful interference basis. TNSI shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radio communication system.

- 6. In the event of any harmful interference TNSI shall cease operations immediately upon notification of such interference, and shall immediately inform the Commission, in writing, of such an event.
- Current 24x7 contact information for this operation is Paul Schweitzer at Mobile: 301-401-4441, Mt. Jackson Teleport (Business Hours): 540-477-5520, Telesat Call Centre (24/7 Access): 1-800-265-3076.
- 8. Grant of this STA is without prejudice to any determination that the Commission may make regarding any of TNSI's pending or future applications.
- 9. Any action taken, or expense incurred as a result of operations pursuant to this STA is solely at TNSI's risk.
- 10. For purposes of Section 1.62 of the Commission's rules, the activities authorized by this STA are not of a continuing nature.

This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective immediately.